

City of Albuquerque P.O. BOX 1293 ALBUQUERQUE. NEW MEXICO 87103

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103 Office of Internal Audit

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August 13, 2002

Internal Audit Committee City of Albuquerque Albuquerque, New Mexico

Audit: Department Of Finance And Administrative Services

Capital Implementation Program - Project Management

00-121

FINAL

INTRODUCTION

The Office of Internal Audit performed a management audit of the Capital Implementation Program (CIP), Department of Finance and Administrative Services (DFAS). This audit was part of the scheduled audits in the FY2000 audit plan.

CIP has been an office of DFAS since December 2001. Prior to that it was administratively located in the Chief Administrative Officer Department. The CIP Division Manager and other CIP personnel did not change during the transition.

City-funded public-purpose capital improvements are undertaken in order to implement the City's adopted goals and objectives. CIP is the coordinating agency for the City's capital programs. Capital projects are funded through general obligation bonds, revenue bonds, Urban Enhancement Fund monies, Tax Increment Fund monies, Community Action Grant monies and special assessment districts. The CIP staff develops the Decade Plan that is submitted by the Mayor to the City Council every odd-numbered year. This plan lists all capital expenditures in order of priority and the proposed year of construction or acquisition.

CIP has a full-time staff of 29 employees who track and manage more than 950 capital projects with funding totaling approximately \$1.4 billion. The Selection Advisory Committee Administrator is an employee of CIP. The implementation program staff negotiates contracts with the architects, engineers and landscape architects selected to provide services on City capital projects. The CIP

fiscal staff processes payments to architects, engineers, landscape architects and construction contractors. The fiscal staff also prepares monthly Financial Status Reports that are distributed to the user-departments throughout the City.

CIP monies fund projects at various departments Citywide. Each project is assigned a project manager, usually at the user-department level. CIP employees directly manage a few projects. Our audit included a review of CIP and user-department procedures for CIP-funded projects.

There are three types of CIP projects. Class I projects are for the construction of facilities and involve construction contractors. Class II projects are constructed by City employees. The materials used for the Class II projects and the salaries of the employees are paid with CIP funds. Acquisitions of equipment, books and other commodities are Class III projects.

Our fieldwork was completed on September 27, 2000. The current status of the projects included in our sample was updated as of March 14, 2002. The audit report is based on our examination of the auditee's activities through the completion date of our fieldwork and does not reflect events or accounting entries after that date.

SCOPE

Our audit did not include an examination of all the functions, transactions and activities related to CIP. Our audit testwork was limited to the following areas:

- Review CIP administrative procedures and controls for tracking CIP costs by project.
- Review CIP administrative procedures and controls relating to the procurement of goods and services for CIP projects.
- Review CIP administrative procedures and controls for payment and invoice review procedures.
- Review CIP construction project management procedures and controls relating to the management of the construction aspects of CIP projects.
- Review CIP activities for compliance with the CIP regulations and other applicable rules, regulations, and laws.

The audit was conducted in accordance with Government Auditing Standards, except Standard 3.33, which requires an external quality control review.

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FINDINGS

The purpose of an internal audit is to identify changes in the auditee's activities that would improve its effectiveness, efficiency, and compliance with administrative policies and applicable rules and regulations. Therefore, the auditee's activities that appear to be functioning well are not usually commented on in audit reports. The following findings concern areas that we believe would be improved by the implementation of the related recommendations.

1. <u>DFAS SHOULD DEVELOP A TRAINING PROGRAM AND A PROCESS TO ENSURE</u> THAT PROJECT MANAGERS ARE TRAINED.

There are almost 1,000 CIP projects being performed for the City at any one time. Department personnel and CIP personnel manage these projects. There is not a consistent process with written procedures that all of these project managers follow. Some of the projects are very specific in nature to a department and some are more general construction projects. The way project managers administer the details of each project varies. Department level project managers may not have previous construction project management experience. For example, a social services program manager managed a construction project in the Department of Family and Community Services.

Project management is the key element in accomplishing the design and construction of projects. The project manager is the City's key representative with the City's design professional consultant for a project during the study, design and bidding phases of the project. The project manager should be the most knowledgeable person in the department concerning all aspects of the project (history, current status, schedule, funding, etc.) and the person who the department director can rely on whenever there is a question regarding the project.

After a construction contract is awarded, the project manager continues to be the City's key representative with the contractor and the design professional during the entire construction and closeout phases of the project. Project managers are responsible for determining that the consultants and the contractors performed the agreed upon work. They are also responsible for approving payments.

Project managers typically do not receive training in project management. The Public Works Department (PWD) has a project manager handbook, however, it is dated December 1993. Project managers do not consistently follow or utilize this handbook. Errors may also occur because project managers may not have the technical or financial background needed for successful project management, or project managers may be relying on CIP or others to

perform the detailed financial review. One project manager interviewed stated she did not have experience as a project manager and had not received any training as a project manager. This project manager did not know the total dollar amount of the projects she managed.

There are some written guidelines to follow in managing projects including:

- City of Albuquerque, Public Works Department, Capital Improvements Design and Construction Project Manager Handbook (PWD Handbook), dated December 1993.
- Regulations Governing the Award and Rejection of Bids and Debarment of Contractors for Public Works Projects of the City of Albuquerque (Appendix B of the PWD Handbook) dated July 8, 1988.
- Administrative Instruction 3-1, Standard Agreement Provisions for Architectural, Engineering and Landscape Architectural Services for the City of Albuquerque, revised October 1, 2001.
- City of Albuquerque Standard Specifications for Public Works Construction (originally issued in 1986) and several updates to the specifications.

There is not one document that describes all of the responsibilities of the project manager. Project managers must act as an effective coordinator of all members of the project team to bring the project to successful completion. Although each manager develops his own style and each project is unique, there are basic principles that apply to all project managers and all types of projects.

During our review of projects we identified areas of concern including charges for unauthorized services, retainage released prior to completion of project, and approval of payments for items that were not in accordance with contract terms. Other areas of concern included inaccurate contract completion dates, non-application of late fees, missing supporting documentation, and missing signature authorizations.

RECOMMENDATION

DFAS should establish a training program for project managers that is offered at least twice a year. The training should include management of construction and financial aspects of projects.

DFAS should consider a Project Manager's Certification Program such as the City's Cash Handling Certification.

DFAS should update and distribute the existing guidelines for CIP project management.

EXECUTIVE RESPONSE FROM DFAS

"DFAS will develop a half day training program for project managers to be offered one to two times each year depending on demand. The training will include management of construction and financial aspects of projects.

"DFAS does not believe that development of a certification program is a function of our department especially since each department with CIP projects has unique project management needs. DFAS believes financial and administrative management of the General Obligation Bond Program and oversight of the Public Art Program and the Urban Enhancement Trust Fund Program are our primary role. Project management is not the primary responsibility of CIP. We are not qualified to develop a detailed Project Management program. UNM Continuing Education has a Project Management Certification program that entails 64 hours of class training and is taught by a variety of industry professionals.

"DFAS will work with the Public Works Department to ensure the manuals are updated and properly distributed for CIP project management."

2. <u>DFAS SHOULD REVIEW THE LANGUAGE IN A/E CONTRACTS RELATED TO ADDITIONAL SERVICES.</u>

The City enters into Architectural and Engineering (a/e) agreements for the design and engineering of City construction projects. The agreements describe the specific services to be provided. In addition, they allow for additional services to be provided. Additional services are broadly described in the agreements. There are 17 categories of additional services including "Providing services relative to future facilities, systems and equipment which are not intended to be constructed as part of the Project. . . Providing any other services not otherwise included in this Agreement as mutually agreed to by the City and Architect."

As of October 2000, the City had 211 open a/e agreements whose original amounts totaled more than \$59 million. There were 1,755 Additional Services Agreements written for these

211 open a/e agreements; an average of 8 per contract. The Additional Service Agreements increased the City's obligation to the a/e firms by approximately \$46 million. The total value of the Additional Services Agreements exceeded the original a/e agreements for 61 of the 211 open contracts. In addition, supplemental contracts in the amount of approximately \$20 million were added to the original contract amounts.

Agreements	Amount
Original A/E Agreements	\$ 59,000,000
Additional Service Agreements	46,000,000
Supplemental Agreements	20,000,000
TOTAL	\$125,000,000

On August 17, 1999, the City Council approved changes to the Selection Advisory Committee Ordinance. The changes came about because of concerns that existing a/e contracts were being used for work that was not related to the original agreement. City Ordinance 14-7-1-4 ROA 1994 states, "The written authorization shall specify the additional or different services, the estimated total cost of the additional or different services, and how the additional or different services relate to the scope of services of the underlying agreement for basic services."

It is known by CIP that as a/e agreements are entered into, additional services will be added to the original agreement. CIP officials stated this is better for cost control because as issues arise, CIP is able to negotiate a fee and add it to the original a/e agreement later. In August 1999 CIP developed new procedures for additional service authorizations for architect, engineering or landscape agreements that require prior written approval of additional services and a description of how the additional or different services relate to the scope of services of the underlying agreement for basic services. New procedures were developed when the ordinance changed but the changes were not incorporated into the boilerplate agreements.

Eight of the twelve projects selected in our sample have open a/e agreements. The construction contracts for three of those projects have been closed. The a/e agreements should be closed when the a/e duties for the project have been completed.

All a/e agreements initiated after the changes to the Selection Advisory Committee Ordinance should have definite ending dates as required. The a/e agreements set up prior to the change in the Ordinance should be reviewed periodically. If the project is completed, the a/e agreement should be closed.

RECOMMENDATION

DFAS should review the language in the a/e contracts related to additional services and incorporate the changes made to City Ordinance 14-7-1-4.

DFAS should review all existing a/e agreements and formally close agreements where the work scope is completed.

EXECUTIVE RESPONSE FROM DFAS

"DFAS will incorporate the appropriate language.

"DFAS will review all existing a/e agreements and formally close agreements where the work scope is completed.

"Both of the above will be implemented immediately."

3. <u>DFAS SHOULD RE-EVALUATE THE PROCEDURES FOR THE APPROVAL OF CHANGE ORDERS.</u>

During construction on projects, circumstances arise which will require additional work. Contract change orders do not require Council approval.

A review of a sample of twelve construction contracts found the following as of March 14, 2002:

- There were six items totaling \$94,351 in change orders for a contract that were described in the justification as "... deleted as part of the cost reduction negotiations that resulted in Addendum #4. Subsequently, the City project manager has decided that this item should be reinstated to the project."
- A contract dated April 19, 1999 with an original contract amount of \$1,261,614 had 10 change orders submitted for a total of \$716,882. This contract was still open as of March 14, 2002, with a revised completion date of June 27, 2000.
- A contract dated March 27, 2000 with an original contract amount of \$1,092,351 had 12 change orders submitted for \$1,239,186 that increased the total contract amount to \$2,331,537.

There are several reasons for change orders:

- 1. Bids for construction of projects may come in lower than the monies set aside for the construction. Therefore in order to spend all the monies designated for the project, deleted items may be added back on to the project or additional items may be added on to the project.
- 2. On some projects, extra monies may become available from other sources such as the State. Therefore in order to spend the additional monies, items are added on to the existing project or another phase of the project may be implemented. These additions are typically not bid out because: a) there could be problems with two contractors working at the same location at the same time, b) the dollar value of the addition may not be high enough to go through the bid process, c) the bid process is lengthy and there are costs associated with the bid process, or d) it may cost less because the contractor and/or equipment is already in place. However, CIP files do not contain documentation explaining why major additions or other phases of the project were not sent out to bid.
- 3. If the project is a "fast track" the design work is not complete so change orders are issued as the design work progresses.

Although it may appear to be more efficient to issue change orders, frequently there is not adequate documentation to support the decision. It is current policy that when an individual change order exceeds \$50,000 it must be approved by the CAO. However, when change orders are individually less than \$50,000, CAO approval is not required although the cumulative amount frequently exceeds \$50,000.

Two contracts had change orders to set up contingencies: On May 4, 2000, an original contract was awarded in the amount of \$8,126,307. Fifteen days later on May 19, 2000, a change order was submitted and approved in the amount of \$50,000 to "... sets up an allowance for unforeseen conditions." Another example was on September 14, 1999 another contract was awarded in the amount of \$8,025,063 with a start date of October 26, 1999. Twenty-two days later on November 17, 1999 a change order was submitted and approved in the amount of \$50,000 to "... allow the Contractor to be paid in a timely manner for change order work items while these items are being accumulated into a group that is of sufficient total value to warrant executing formal change order documentation and approvals." Based on the justification for these two change orders, it appears that they increased the total dollar amount of the projects without changing the scope.

Per the City of Albuquerque Standard Specifications for Public Works Construction, a change order is a written order to a contractor signed by the owner authorizing an addition, deletion, or revision in the work or an adjustment in the contract price or the contract time issued after execution of the agreement. A contingency does not fit this definition of a change order.

Construction contracts do not allow for amendments. The only method for changing construction contracts is through change orders. Project managers should be responsible for monitoring the progress and any charges added to projects. Project managers should ensure that change order work is not included in the original contract amount and that the file justifies the need for the change order. The project manager, however, may not be trained to discern changes that may not be appropriate or that lack proper documentation.

RECOMMENDATION

DFAS should re-evaluate the procedures for the approval of change orders. DFAS should strengthen the justification for change orders or should require that the justification explain in detail what is being added and why and ensure that contract changes and modifications are documented. Justification should include the basis for not bidding out major changes.

DFAS should establish a percentage of original cost over which cumulative change order amounts should require additional justification and approval. (For example, once cumulative change orders reach 30% of original contract amount, additional justification should be required.)

DFAS should ensure that change orders are not approved to establish a fund for contingencies.

EXECUTIVE RESPONSE FROM DFAS

"DFAS will continue to review change orders with an increased awareness of the justification of the change order. DFAS does not prepare the change orders, but will request further information from the Department when justification is not sufficient. If the scope of work warrants it, DFAS will coordinate with the department to determine if the work should be re-bid.

"DFAS would recommend that a percentage not be established to require additional justification and approval. Additional justification will be requested if the change is not clear. If seems that approval by the City project manager, consultant, department director and CAO, as well as DFAS are already covered in the Change Order Form.

"The fund for contingencies was established for the convenience of the Public Works Department Construction Project Engineer to provide a convenient manner to process Field Orders to Change Orders for prompt payment to the Contractor (10.3 and 10.5 of the City's General Conditions).

"DFAS will inform project managers that we will no longer process these types of Change Orders."

4. <u>DFAS SHOULD DEVELOP PROCEDURES TO ENSURE THAT CHANGE ORDERS ARE PROPERLY COMPLETED.</u>

We reviewed change orders for a sample of twelve construction contracts within various departments at the City. A change order is a written authorization issued after execution of the original agreement authorizing an addition, deletion, or revision in the work or an adjustment in the contract price or the contract time.

One of the twelve construction projects reviewed had change orders that were not signed by the architect/engineer. A City official stated the reason for this was because the changes were for additional work that was not part of the original scope. Two change orders for the Solid Waste Management Department (SWMD) Intermediate Processing Facility (IPF) were not signed by the architect/engineer. These two change orders totaled \$86,604.08 or 5% of the total contract price and 47% of the total change orders for the contract. The Engineering Services Agreement between the City and an engineer requires that the engineer review change orders for acceptability and provide comments to the City. There was no evidence of review by the engineer and/or architect of changes in the work performed by contractors. According to CIP officials the change order was related to a piece of equipment and did not require review by the engineer and/or architect. However, this was not documented on the change order.

The Standard Construction Contract Special Provisions Section states, "Liquidated damages, in the amount per day shown in the Bid Proposal will be assessed against the CONTRACTOR for each calendar day, or portion thereof, that the Work remains incomplete after expiration of the agreed time allotted for construction, including any approved extensions of time granted."

Change orders were submitted for eight of the twelve contracts in our sample. Change orders were approved to increase the scope and price of the contract but they did not extend the date of completion. These eight contracts were not completed on the stated completion dates.

Therefore, liquidated damages should have been assessed. In some cases these change orders were submitted on or after the completion date and still did not change the number of days and the completion date.

In some cases, the City decides not to assess liquidated damages; however, the basis for the decision is not always documented.

One project had a revised completion date of April 18, 1999. As of July 30, 1999 the project was not complete and the days had not been extended. Per the construction contract, liquidated damages should have applied at \$500/day from the April 18, 1999 revised completion date until July 30, 1999. For 103 days, the late fees would have totaled \$51,500. On July 30, 1999 the project was not complete and a change order was submitted requesting additional time.

Another construction contract reviewed had a completion date of March 1, 1998. Two change orders were submitted for additional work on April 1, 1998 and July 9, 1998 requesting more work be done; yet the completion date was not extended. On November 30, 1998 the project was still not complete and another change order was submitted to extend the completion date. Per the construction contract, liquidated damages should have applied at \$1000/day for the period March 1, 1998 to November 30, 1998 or for 274 days. This would amount to late fees of \$274,000.

RECOMMENDATION

DFAS should develop procedures to ensure that all change orders are properly completed and approved by the City project managers and reviewed by the architect or engineer. If it is not appropriate to have the change order reviewed by the architect or engineer, the change order should include an explanation.

DFAS should review contractors' justifications for delayed completion of projects. This review should occur prior to the original completion date. Review and approval of the extension of completion dates should be documented. In those cases where the extension of completion is not justified and it is in the best interest of the City, DFAS should collect liquidated damages.

EXECUTIVE RESPONSE FROM DFAS

"DFAS will take the responsibility to ensure change order forms are complete prior to final sign off.

"DFAS will review contractors' justification for delayed completion of projects. However, this can take place in the field without CIP's knowledge (see 10.3 of the General Conditions). DFAS will coordinate with the department and legal in collection of liquidated damages as appropriate."

5. <u>DFAS SHOULD DEVELOP PROJECT PLANNING THAT REDUCES THE NEED FOR</u> CHANGE ORDERS.

Construction contracts are written with a scope of services. The scope is defined as the entire construction to be performed as provided in the contract documents. The City has a process for addressing unforeseen issues related to the scope of services. Change orders can be authorized for deletions, additions or revisions in the scope of services.

The City's Purchasing Rules and Regulations (Section 30.3) states, "No payment shall be authorized for goods, services or construction which . . . do not meet the . . . scope of services stipulated in the contract or purchase order . . ."

We randomly selected twelve construction contracts for review to determine the number and dollar amount of change orders performed. These construction projects were from the following departments: Aviation, CIP, Cultural, Family and Community, Fire, Parks and Recreation, Police, Solid Waste, and Transit. Of these twelve contracts, six contracts were open and six were closed. Observations were as follows:

SIX OPEN CONTRACTS

- The number of change orders submitted per contract as of March 14, 2002, ranged from five to twenty. The total number of change orders submitted on the six contracts as of March 14, 2002 was 65.
- The percentage increase for these change orders as related to the original contract price ranged from 4.3% to 56.8%.
- Two of the contracts were still shown as open, however, the projects appear to be completed because of the length of time since the date of last transaction. These are:

Alb Biological Park North Central Bldg - contract date January 3, 1995 – date of last transaction was June 3, 1997.

Alamosa Center for Family & Community Services Phase 1 – contract date July 6, 1998 –date of last transaction was January 24, 2000.

SIX CLOSED CONTRACTS

- The number of change orders submitted per contract ranged from two to twelve. The total number of change orders submitted on the six contracts as of March 14, 2002 was 59.
- The percentage increase from the original contract price for these change orders ranged from a 1.6% increase to 113.4% increase in the total contract price.

Some reasons construction project costs may exceed budget or be greater than the original bid construction contract price may be: 1) the project is not designed with the end-result in mind; 2) sound planning of the construction of the project has not been performed; or 3) portions of the construction work has been performed without complete designs or plans.

RECOMMENDATION

DFAS should develop project planning that reduces the need for change orders.

EXECUTIVE RESPONSE FROM DFAS

"DFAS believes that it has developed project planning that reduces the need for change orders. Change Orders can be the result of a combination of things (additional funding, expansion of service requiring additional space, etc.). Projects are designed with the end result in mind. Complete design and plans are always in place before any project is bid out for construction."

6. <u>DFAS SHOULD MAKE PROJECT MANAGERS AWARE OF THE POTENTIAL ISSUES ASSOCIATED WITH COMBINING ART PROJECTS WITH CONSTRUCTION PROJECTS.</u>

The Kimo Theater Renovations Project Manual, states, "Contractor shall include the sum of one hundred twenty thousand and 00/100 dollars (\$120,000.00) for interior building conservation, decorative sculptural elements and decorative painting." Addendum No. 1 of this same contract states the name of the specific conservator. This conservator submitted a proposal in the amount of \$119,992 for the conservation and restoration of the historic

painted ceiling and wall ornamentation and the design, execution and installation of missing ornamental elements for the historic Kimo Theater.

In October 1999 the New Mexico Department of Labor (NMDOL) conducted a job site inspection on the Kimo Theater Renovation. NMDOL found that the conservator failed to submit accurate certified payroll reports, failed to pay minimum wage rates, and failed to classify workers according to the work performed. In January 2000, the contractor for the Kimo submitted a change order that included \$14,614 for payment of wage rate differential for Art Conservator. This amount included \$12,339 for the conservator plus additional monies for the contractor for bond, overhead and profit and sales tax. In May 26, 2000 the NMDOL confirmed that the wage differential paid to the employees by the conservator was \$8,532.82.

The special provisions of the construction contract, Section 6: Minimum Wage Rates states "The minimum wages to be paid the various classes of mechanics and laborers engaged by the CONTRACTOR and Subcontractors for Work under this Contract including any additional, omitted or changed work, shall not be less than the amount as determined and established by the Office of the State Labor and Industrial Commission as provided by Section 13-4-11 NMSA 1978 and in full force and effect, without exception, on the date of the Contract and during the lifetime of this Contract."

This situation arose because what was normally considered a public arts project became a public works project when it was included in the construction project. Therefore the art contract became subject to the state minimum wage rates. Artists typically are not required to pay specific wage rates.

RECOMMENDATION

DFAS should make project managers aware of the potential issues associated with combining art projects with construction projects.

EXECUTIVE RESPONSE FROM DFAS

"DFAS will make project managers aware of the potential issues associated with combining art projects with construction projects.

"This will be implemented immediately."

7. <u>DFAS AND SWMD SHOULD ENSURE THAT EVERYTHING REQUIRED TO CLOSE</u> A CONTRACT IS COMPLETED PRIOR TO THE FINAL PAYMENT.

Specific procedures and documents are required when a construction contract is completed. These include Contract Closeout, Final Inspection, Final Change Order, and Payments to Contractors and Completion. These documents and procedures provide support for the work performed.

A. Final Inspection and Punch List

Both the City of Albuquerque Standard Specifications for Public Works Construction and the PWD Handbook, 7.12 Final Inspection, state "When the CONTRACTOR notifies the ENGINEER that the project is complete, the ENGINEER will make a final inspection with the OWNER, Project Manager, and the CONTRACTOR and notify the CONTRACTOR via a 'punch list' of written items detailing all particulars in which the inspection reveals that the project is incomplete or defective. . . . The CONTRACTOR shall immediately take action to remedy all deficiencies shown on the punch list." Section 7.13 Final Change Order states "After the CONTRACTOR has completed all items on the punch list to the satisfaction of the ENGINEER and delivered all certificates of inspection, marked-up record drawings and other documents, the CONTRACTOR may request final payment."

For the IPF, the project manager was unable to provide the required documentation for the Contract Closeout. This included the Certification of Substantial Completion and the Final Inspection Documentation. This documentation should have been on file. SWMD requested the punch list and final inspection documentation from the contractor. One of the documents received was a punch list with "Done" written on it. The document was not dated, and did not indicate what was done to resolve each of the deficiencies on the list.

Final inspection documents, including a punch list that has evidence that all outstanding issues have been resolved provide assurance that the project is complete.

B. Operation And Maintenance Manuals

City of Albuquerque Standard Specifications for Public Works Construction, Section 14, Payments to Contractors and Completion states, "Requirements for Substantial completion shall include, but are not limited to, submittal and approval by OWNER of operation and maintenance manuals and completion and acceptance by OWNER

of training of OWNER's operation and maintenance personnel, all as defined in these Contract Documents."

The IPF project included the purchase of a large piece of equipment with a cost of approximately \$135,900. The IPF project manager was unable to provide: 1) Field Performance Tests to include written plan detailing steps involved in the equipment, system and subsystems startup and performance testing, and 2) Equipment Testing and Startup to include detailed testing procedures for shop tests, field performance tests and 3) final acceptance tests as specified in the various equipment sections. These specific documents were required per the construction contract between the City of Albuquerque and the Contractor.

The project manager should have ensured that documentation was complete and followed up on and obtained the required documents.

C. Retainage

Prior to June 15, 2001, state law allowed a municipal owner to withhold payment of a small percentage of each invoice from construction contractors, until the completion of the project. This percentage that was withheld is called a retainage, and the City would typically withhold five percent of each invoice from the contractor. The purpose of retainage withheld by the owner was to ensure that construction contractors complete the project and correct any deficiencies prior to receiving full payment. When the project was completed, and any deficiencies corrected, the retainage was then paid to the contractor.

Contracts dated after June 15, 2001 are no longer subject to retainage requirements. However, contracts dated prior to June 15, 2001 are subject to retainage requirements. A review of the Application for Payment for the IPF project found that the contractor received retainage prior to completion of the project. The contractor was paid the retainage on May 25, 1999. However, three change orders for \$113,000 were submitted after that date. It appears that the contract was not complete when the retainage was paid to the contractor.

RECOMMENDATION

DFAS and SWMD should obtain documentation as required by the contract. Operating and maintenance manuals should be provided to the City before final

payment for the project is approved. Performance testing should be performed on all equipment prior to final payment.

DFAS and SWMD should ensure that contracts dated prior to June 15, 2001 are complete before releasing all of the retainage.

EXECUTIVE RESPONSE FROM DFAS AND SWMD

"SWD has documentation available that provides information regarding specific procedures and documents that are required when a construction contract is completed. SWD has 6 complete volumes of documentation that are available for inspection at any time by Internal Audit.

"SWD will ensure that contracts dated prior to June 15, 2001 are complete before releasing all of the retainage."

8. <u>DFAS SHOULD ENSURE THAT QUALITY CONTROL PROCEDURES ARE FOLLOWED.</u>

There are several ways for the City to obtain assurance that the work performed and equipment purchased is the quality that was contracted for. Two a/e supplemental agreements in our sample contained a provision that requires the architect and the project manager to make an on-site observation of the project 11 months after the completion date. The observation should determine whether any of the work is defective or not in accordance with the contract. The architect is to give written notice of any such condition to the City so that the City may require the contractor to correct any problem before the contractor's warranty and guarantee expire. While the revised Standard Agreement Provisions for Architectural and Landscape Architectural Services for the City dated October 1, 2001 contained this provision, the Engineering Services Agreement did not.

Some of the problems identified with the contracts include:

- A. The Civic Plaza Phase II Renovation scope of services included the "Demolition of the Plaza surface and replacement of the waterproof liner."
 - The original a/e contract dated February 2, 1992 was for \$215,875.
 - A supplemental agreement dated April 25, 1995 changed the total of the a/e contract to \$609,950.

• In January 1997, an additional service was added to the contract for construction observation services for the installation of waterproofing in the amount of \$7,518.

Also, two years later, in August 1999, the contractor for this project submitted a change order for \$14,862 to provide/improve drainage of various parts of the plaza floor including the drain at fountain, drain for planter, change planter drain type, add planter drain, and add drains at fountain pipes.

These above services should have resolved the structural problems that caused the water damage to the underground parking garage. However, as of the audit date, Civic Plaza is still leaking water into the parking garage.

B. The IPF included the purchase of a glass crusher to support the glass-recycling program. The City had to go back to the contractor and manufacturer for repairs to the glass crusher. A SWMD employee stated that there was a regularly recurring problem with this piece of equipment and that he knows what it is and how to fix it. SWMD management states that the glass crusher met contract specifications and that the problems experienced with the machine were operational issues related to normal wear because processing glass is abrasive and corroding.

SWMD has records that show the total weight of glass crushed since the purchase of the equipment. Based upon six tons of glass per hour, for five months during FY99 the glass crusher operated approximately 234 hours. For all twelve months of FY00 the glass crusher operated approximately 119 hours. Based upon 8-hour days, the glass crusher operated approximately 30 days in FY99 and 15 days in FY00.

SWMD personnel stated that a one-year walk through was not performed. They did not believe that the project manager was responsible and that nothing formal required this walk through. A lessons learned de-briefing meeting was not held to discuss what was learned from this project.

The PWD Project Manager Handbook dated December 1993 has the following requirements related to Warranty and Guarantee, and Latent Defects.

Contractor warrants and guarantees to the OWNER that . . . all work will be of good quality and free from faults or defects and in accordance with the requirements of the Contract documents. . . expiration of one year after

the date of Substantial Completion . . . if any work is found to be defective, CONTRACTOR shall promptly, without cost to OWNER . . . either correct such defective work or . . . remove it from the site and replace it with non-defective work

The warranty and guarantee provisions of the General Conditions require the CONTRACTOR to fix latent defects for up to one year after the OWNER accepts the project.

Either the Project manager or the Construction Management engineer should arrange for an inspection of the project just prior to the time of warranty expiration and if any latent defects materialize during the warranty period they should be immediately documented and brought to the attention of the Contractor for fixing.

The City has invested a large amount of money in CIP projects. The City should ensure that projects are completed as planned initially, and that any defects are corrected within the warranty period.

The PWD Project Manager Handbook also recommends that a "post-construction review debriefing meeting be held to discuss what lessons have been learned...attendees would be the Project Manager, the Consultant, Utilities Coordinator, the Chairman of the DRC and the Construction Management Engineer..." According to CIP officials this process was abandoned several years ago because of problems. Based on the issues identified in this report, it would be valuable to resume holding these meetings to discuss lessons learned.

RECOMMENDATION

DFAS should ensure that the engineering contracts contain the quality control provision requiring on-site observation by the architect or engineer and the project manager prior to date of completion of the project and approximately 11 months after the completion of the project.

DFAS should ensure that warranty and guarantee and latent defect requirements established for CIP projects are complied with in order to ensure that the City received everything that the contract required.

DFAS should resume post-construction review de-briefing meetings to discuss lessons learned on CIP projects.

EXECUTIVE RESPONSE FROM DFAS

"DFAS believes that engineering contracts contain the quality control provision requiring on-site observation by the architect or engineer, however it will continue to ensure that the appropriate language is included in all future contracts.

"DFAS believes that it currently complies with warranty and guarantee and latent defect requirements established for CIP projects. DFAS believes that it does receive everything required in the contract. However, DFAS will continue to ensure that all requirements in the contract are met.

"DFAS will resume post-construction review de-briefing meetings to discuss lessons learned on CIP projects."

9. PWD SHOULD ENSURE THAT ALL UPDATES TO THE STANDARD SPECIFICATIONS ARE AVAILABLE TO CONTRACTORS BIDDING ON CITY CONSTRUCTION PROJECTS.

The City of Albuquerque standard construction contract incorporates City of Albuquerque Standard Specifications for Public Works Construction, 1986 Edition, General Conditions and Technical Specifications, along with the updates to the standard specifications. There are six updates to the standard specifications that were not all incorporated into the 1986 edition. When we requested the six updates from PWD, only updates three through six could be located. A PWD representative stated that no big changes took place until the fourth update.

The standard specifications are sold to contractors and bidders of City construction projects. When PWD sold the standard specifications it sold only the 1986 edition that was updated in December 1992, and did not include all of the updates. The PWD representative stated that the bidding contractors did not receive a copy of the updates because they did not request the updates. The PWD representative stated that the construction contract states there are standard specifications and also that there are updates to the standard specifications. The contractor must separately request the updates.

Without these standard specification updates, users of these standard specifications may not have all necessary information to bid on a contract.

RECOMMENDATION

PWD should update its 1986 Edition of the City of Albuquerque Standard Specifications for Public Works Construction.

PWD should include a copy of the six updates when selling the 1986 Edition of the City of Albuquerque Standard Specifications for Public Works Construction until the specifications are updated.

EXECUTIVE RESPONSE FROM PWD

"PWD updated its 1986 Edition of the City of Albuquerque Standard Specifications for Public Works construction over 2 years ago. Through July 31, 2002 there are 6 updates in the manual that is distributed.

"PWD does include a copy of the 6 updates when selling the 1986 Edition of the City of Albuquerque Standards Specifications. The 6 updates have always been included when the edition is sold to the general public.

10. DFAS SHOULD REVIEW ITS CAPITAL PROJECT TRACKING SYSTEM.

CIP has two automated project tracking systems, the Capital Projects Tracking System (CPTS) and an Excel Spreadsheet Project Tracking System (Excel Spreadsheet).

The CPTS: 1) monitors administrative limits for the transfer of appropriations between projects or contingencies; 2) lists scope of projects; and 3) monitors CIP purchase orders for design and construction costs e.g. shows how much was paid out on a contract, how much was paid in change orders, and how much was in additional services.

The Excel Spreadsheet is used to produce the Financial Status Report (FSR) monthly that is distributed by CIP to all City departments for their review. The Excel Spreadsheet is a summary level report and does not show detail. The FSR lists monies allocated by funding source and funding year. It is difficult for the user to determine the total monies allocated to a project. For example, in the FSR the Explora Science Museum had funding listed under CIP/Art in Public Places, CIP/Quality of Life, and twice under CIP/Miscellaneous. As a user of the report you must be aware of the funding years and sources to be able to determine how much total funding is allocated to Explora. The report does not always specifically identify the project by the project name. For example, Explora was listed as APP/Science Cntr, Science Ctr Ph II, Explora Scien & Mus '99, and Explora Science Ctr. These reports do not

provide information that is needed by the project managers responsible for overseeing the projects, or the bodies making decisions that provide the funding for the projects.

Currently, CPTS is not fully implemented and does not provide all of the information needed to make decisions. The CPTS Implementation Plan, dated June 1992, lists "Elimination of redundant data entry" as a benefit of the system. Currently CIP personnel are manually entering the same information captured by CPTS on an Excel Spreadsheet to produce the FSR.

In the 1999 General Obligation Bonds, CIP received \$250,000 to modify the CPTS so that it could generate the FSR. As of the audit date the modification of the tracking system was not complete. However, \$190,000 has been spent on hardware, software, and training for the CIP staff and the ISD program manager. The remaining \$60,000 is reserved for additional training. The ISD employee assigned to the CPTS project was recently assigned to assist in the acquisition and implementation of a new financial system. This system may directly affect the CPTS. Therefore, the completion of the modifications to CPTS has been extended. The target completion date for the new financial system is July 1, 2005.

User departments need complete and accurate information to make decisions regarding the projects they manage. The information should be presented in a way that tracks a project in total with subtotals for funding years and sources. The tracking system should provide users with current project balances without the need to reconcile the FSR.

2-12-5 ROA 1994 states.

The Mayor shall submit a status report to the Council summarizing the implementation of each Capital Improvements Program at annual intervals until all projects in the approved Capital Improvements Program are completed. The status report shall also list every change made pursuant to 2-12-4 and shall include the following information about each change:

- (A) The specific project that was changed;
- (B) The total amount originally approved by the Council for the project;
- (C) The amount of the increase or decrease that was authorized without prior Council approval;
- (D) The reason(s) for the change; and
- (E) If the amount designated for a project was increased, the account(s) and project(s) from which the funds were transferred, or if the amount designated for a project was decreased, the account(s) and project(s) to which the funds were transferred

(F) If a change combines all or parts of projects, the individual account(s) and project(s) which were combined and the amount of funds involved from each

This Ordinance was revised in 2001; the revision requires further detail of the projects in addition to what was already required by the Ordinance. CIP has only submitted one Status Report to the Council since Fiscal Year 1997. The Status report did not include all programs and did not include all of the detailed information for each program required by the Ordinance. The Council has the responsibility to make decisions on CIP projects that require a substantial amount of City resources. Therefore, the Council should have complete and accurate information as required by the Ordinance to enable it to make decisions concerning CIP projects.

RECOMMENDATION

DFAS should review and implement a project tracking system that does not require entry into two different systems. Tracking system reports should be useful and not require additional reconciliation. The tracking system should provide information to user departments in a manner that can be sorted by project as well as funding years and sources.

DFAS should ensure that the required Status Report is provided timely to project managers and to the Council.

EXECUTIVE RESPONSE FROM DFAS

"DFAS is currently working to develop a new financial reporting system that captures information regarding the status of a project and provides financial information regarding funding source and funding years. The system will also include year to date expenditures and fund balances by project. Target date for the new financial system is July 1, 2005.

"DFAS concurs with this finding and will ensure that the Annual Status Report is provided timely to project managers and to the Council.

"This will be implemented immediately."

11. <u>DFAS SHOULD BE CONSISTENT IN THE BASIS FOR ACCEPTING OR REJECTING</u> BIDS.

The architect on a CIP project recommended a contractor be awarded a contract even though the bid did not meet required specifications for Bid Bond format. The contractor failed to use the City of Albuquerque's Bid Bond form in its bid. This was a technical irregularity and could be waived or could be cause to reject the bid. The contractor also listed a subcontractor that was not a prebid approved manufacturer on the project. Based upon the low bid submitted by the contractor, the architect recommended that the contract be awarded to the contractor, even though the contractor did not meet the required specifications stated above.

The PWD Handbook states, "The Project Manager, the consultant, and the Engineering Coordinator then review all bids for fatal flaws, irregularities, and arithmetic accuracy. A fatal flaw might be failure to list or list properly, required subcontractor information . . . or the bidder does not have the proper license classification to bid the work. The Engineering Coordinator also reviews Bid Bonds for compliance with format, amount and Treasury listing of Surety." A CIP representative stated that it is up to the project manager to decide if bid differences are minor issues.

The architect for the project recommended that the City accept the bid from the contractor while acknowledging the deficiencies. Therefore, there may not be consistency in the decision to accept or reject a bid. These requirements are included in the bid documents to protect the City and ensure that the City receives the most value for its money.

RECOMMENDATION

DFAS should be consistent in the basis for accepting or rejecting bids.

EXECUTIVE RESPONSE FROM DFAS

"DFAS is consistent in evaluating bid discrepancies and waiving technical irregularities when it is the best interest of the City and determined after consultation with the Legal Department.

12. <u>DFAS SHOULD REVISE THE BOILERPLATES AND STANDARD SPECIFICATIONS</u> TO INCLUDE AN AUDIT CLAUSE.

CIP uses boilerplate contracts for both the Architectural Services Agreement and the Engineering Services Agreement (a/e agreement) that were last modified October 1, 2001. The a/e agreement includes language that conflicts with the Internal Audit Ordinance. This is a repeat finding from Management Audit Report of the Capital Improvements Program, Office of Management and Budget, Mayor/CAO Department, Audit Report 95-128 dated November 28, 1995.

The a/e agreement states, "Records of expenses by the Architect (Engineer) and its consultants pertaining to all services provided under this Agreement . . . shall be available at mutually convenient times to the City or the City's authorized representative, but only upon the request of the Chief Administrative Officer."

The Internal Audit Ordinance states, "All officials, contractors, and employees of the City shall furnish the Internal Auditor with requested information and records within their custody regarding powers, duties, activities, organization, property, financial transactions, and methods of business required to conduct an audit or otherwise perform audit duties." The Internal Auditor is not required to make requests for information through the CAO unless the officials or employees fail to produce the requested information. The a/e agreement should be modified to agree with the Internal Audit Ordinance

RECOMMENDATION

DFAS should revise the boilerplate a/e agreements to be consistent with the provisions of the Internal Audit Ordinance

EXECUTIVE RESPONSE FROM DFAS

"Failure to include internal audit in the audit clause was an oversight. All such future contracts will be supplemented to include the missing language."

13. <u>DFAS SHOULD ENSURE THAT LEGAL IS PROVIDED WITH THE FINAL ESTIMATED CONSTRUCTION COSTS.</u>

The Capital Improvements Design and Construction Project Manager Handbook, Section 5.23 Approval of Final Estimated Construction Costs, states that "a certificate of approval of

Final Estimated Construction Cost <u>will be required</u> by Legal prior to their sign-off of the Advertisement for Bids." This requirement was instituted to correct a lack of a formal approval process for construction cost estimates submitted by consultants. This approval is important for all projects and particularly significant for those projects where the consultant's fees may be adjusted based on the final estimated construction costs.

A certificate of approval was not found with the contract documents for one project out of the 12 construction contracts in our sample. The certificate should have documented the Project Manager's approval of the increase in the final estimated construction costs from \$1.8 million to \$1.9 million, a 5.5% increase, prior to Legal signing off. DFAS should request and obtain the necessary authorizations prior to awarding contracts and incurring expenses for construction projects.

RECOMMENDATION

DFAS should ensure that the Legal Department has been provided with the project manager's certificate of approval of final estimated construction costs for CIP projects prior to requesting Legal's approval to advertise for bids.

EXECUTIVE RESPONSE FROM DFAS

"DFAS concurs with the finding."

CONCLUSION

By implementing these recommendations, the Department of Finance and Administrative Services, Capital Implementation Program can improve its effectiveness, efficiency, and compliance with administrative policies and applicable regulations.

We wish to thank all the personnel from the Department of Finance and Administrative Services, Capital Implementation Program and the various user-departments who assisted the Office of Internal Audit during this audit.

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MANAGEMENT AUDIT REPORT

OF

CAPITAL IMPLEMENTATION PROGRAM - PROJECT MANAGEMENT

DEPARTMENT OF FINANCE AND ADMINISTRATIVE SERVICES

REPORT NO. 00-121



CITY OF ALBUQUERQUE OFFICE OF INTERNAL AUDIT

MANAGEMENT AUDIT DEPARTMENT OF FINANCE AND ADMINISTRATIVE SERVICES REPORT NO. 00-121

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